DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William **Report No:** WIR-029462

Address: 333 Burma Road **Date Inspected:** 03-May-2013

City: Oakland, CA 94607

Project Name: SAS Superstructure **OSM Arrival Time:** 700 **OSM Departure Time:** 1730 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job Site

CWI Name: CWI Present: Yes No Jesse Cayayab **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component: SAS** Tower

Summary of Items Observed:

Caltrans Quality Assurance Inspector (QA) Joe Adame was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

In Process Visual Inspection

RWR 201304-011, RWR 201304-012

ESW N-041,"Q"-Face A:

The QA Inspector was informed that during air carbon arc gouging of weld repair, ABF welder Chris Bruce (WID-8901) had observed planar type indications in the excavation of ESW "N" Face A @ Y-5475, depth of 36mm & 45mm. QC Inspector Jesse Cayayab and the QA Inspector verified the indications with MT after some grinding. The welder and QC Inspector discussed that they would need to continue grinding to remove all indications and will not exceed the maximum depth of excavation (68mm-85% of weld thickness) for the 80mm/100mm (Trans.) weld as described in the request for welding repair. The two planar type indications were measured by QA at 50mm & 60mm. WID-8901 performed additional excavating of the repair until the indications appeared to be removed at 60mm deep. After grinding to bright metal the QC Inspector performed MT testing of the excavation to ensure all discontinuities were removed prior to welding. The QA Inspector also performed MT inspection of the repair and did not observe any additional indications. Location of new excavation was:

ESW "Q", Face A

Y= (Original) 5475mm, 6335mm (Excavated 5150~6600)

L=770mm

W = 50 mm

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D= 60mm* after acceptance

The QA/QC Inspector discussed with the welder the importance of maintaining required 300° degrees Fahrenheit preheat during welding. Welding did not commence on this shift on the repair. Please see TL-6028 for additional details on items inspected.

Tower Electroslag Welds (ESW)

RWR-201304-005

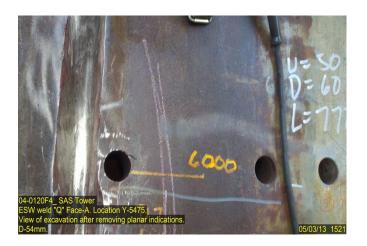
ESW E-045, Location "L"- FaceA, B:

QA performed Ultrasonic Testing (UT) on approximately 660mm of Tower Electroslag Complete Joint Penetration (CJP) shear plate weld designated as ESW "L" face B. Location -Y (Originial)=5740mm & 5430mm~5900mm of this weld was inspected using this testing method.

QA observed three (3) recordable planar indications at the time of testing.

QA observed one (1) rejectable planar indication at the time of testing.

QA performed UT of the above mentioned ESW location in accordance with the approved supplemental procedure for confirmation and evaluation of planar type defects. Tandem report for work performed on this date will be completed by QC technician and signed by both QA/QC parties. Items listed on tandem report reflect indications agreed upon by QA/QC. Please see TL-6027 for complete listing of QA recorded indications.







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Summary of Conversations:

Only general conversations with ABF/JV QC NDT personnel relevant to testing and work performed during this shift.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

Inspected By:	Adame,Joe	Quality Assurance Inspector
Reviewed By:	Mertz,Robert	QA Reviewer